Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1. (Currently Amended) A switch for a telecommunications network, said switch comprising:

a call processing application, said call processing application handling interactions with originating and terminating agents in accordance with an interaction framework;

a switch reprovisioning system coupled to said call processing application, said switch reprovisioning system reprovisioning said call processing application for said interactions with said originating and terminating agents;

a user interface coupled to said switch reprovisioning system, said user interface configured for receiving voice commands, issued by a switch administrator, for transmission to said switch reprovisioning system and generating audibilized responses, issued by said switch reprovisioning system, for transmission to said switch ~~administrator.~~ administrator; and

a recognizable audible input table coupled to said switch reprovisioning system and said user interface, said recognizable audible input table maintaining a plurality of recognizable reprovisioning instructions suitable for use by said switch reprovisioning system to modify said interaction framework used by said call processing application.

Claim 2. (Original) The switch of claim 1 wherein said switch further comprises:

an interaction application coupled to said switch reprovisioning system and said call processing application, said interaction application constructing said interaction framework for said call processing application; and

at least one provisioning table which contains a plurality of provisioning instructions suitable for use by said call processing application;

said interaction application receiving at least one voice command from said user interface and reprovisioning said switch by modifying, using selected ones of said plurality of instructions maintained in said provisioning table, said interaction framework for said call processing application.

Claim 3. (Currently Amended) ~~The switch of claim 2 wherein said switch reprovisioning system further comprises:~~ A switch for a telecommunications network, said switch comprising:

a call processing application, said call processing application handling interactions with originating and terminating agents in accordance with an interaction framework;

a switch reprovisioning system coupled to said call processing application, said switch reprovisioning system reprovisioning said call processing application for said interactions with said originating and terminating agents;

a user interface coupled to said switch reprovisioning system, said user interface configured for receiving voice commands, issued by a switch administrator, for transmission to said switch reprovisioning system and generating audibilized responses, issued by said switch reprovisioning system, for transmission to said switch administrator;

at least one provisioning table which contains a plurality of provisioning instructions suitable for use by said call processing application;

an interaction application coupled to said switch reprovisioning system and said call processing application, said interaction application constructing said interaction framework for said call processing application, said interaction application receiving at least one voice command from said user interface and reprovisioning said switch by modifying, using selected ones of said plurality of instructions maintained in said provisioning table, said interaction framework for said call processing application;

a voice recognition application coupled between said user interface and said interaction application; and

a recognizable audible input table coupled to said voice recognition application, said recognizable audible input table maintaining a plurality of recognizable provisioning instructions suitable for use, by said interaction module, to modify said interaction framework used by said call processing application;

wherein said voice recognition application is configured for detecting audible sounds, determining if said detected audible sounds corresponds to any of said recognizable instructions

maintained in said recognizable audible input table and issuing, to said interaction application, said recognizable provisioning instructions corresponding to said detected audible sounds; and

wherein said interaction application ~~reprovisioning~~ reprovisions said switch by modifying said interaction framework using said issued provisioning instructions.

Claim 4. (Original) The switch of claim 3 wherein said provisioning instructions maintained in said recognizable audible input table includes resource provisioning information for use in modifying interactions between said switch and originating agents.

Claim 5. (Original) The switch of claim 3 wherein said provisioning instructions maintained in said recognizable audible input table includes interaction provisioning information for use in modifying interactions between said switch and originating agents for collecting information related to call set-up and call routing.

Claim 6. (Original) The switch of claim 3 wherein said provisioning instructions maintained in said recognizable audible input table includes subscriber provisioning information for use in modifying interactions between said switch and originating agents for collecting information related to subscriber authorization.

Claim 7. (Original) The switch of claim 3 wherein said provisioning instructions maintained in said recognizable audible input table includes translations provisioning information for use in modifying interactions between said switch and said terminating agents.

Claim 8. (Original) The switch of claim 3 wherein said reprovisioning system further comprises:

a voice generation application coupled between said user interface and said voice recognition application; and

an output audibilization table coupled to said voice generation application, said output audibilization table maintaining a plurality of audibilizations for use, by said voice generation application, to generate audible messages for transmission to said user interface in response to

receipt of replies issued by said interaction module in response to said provisioning instructions issued by said voice recognition application.

Claim 9. (Original) The switch of claim 8 herein said user interface further comprises:

an audio input device for detecting audible sounds;

an A/D converter having an input coupled to said audio input device and an output coupled to said voice recognition application, said A/D converter converting audible sounds received from said audio input device into digitized signals for transmission to said voice recognition application;

an audio output device for generating audible sounds; and

a D/A converter having an input coupled to said voice generation application and an output coupled to said audio output device, said D/A converter converting digitized signals received from said voice generation application into audible sounds for transmission to said audio output device.

Claim 10. (Currently Amended) A switch for a telecommunications network, said switch comprising:

at least one hardware-based component;

at least one software-based component;

a switch monitoring system coupled to each of said at least one hardware-based component of said switch and to each one of said at least one software-based component of said ~~switch;~~ switch, said switch monitoring system receiving operational information from said at least one hardware-based component and said at least one software-based component and issuing, based upon said received operational information, a selected one of a plurality of instructions, at least one of said plurality of instructions being an instruction to issue a specified audible notification;

an expert system application coupled to each of said at least one hardware-based switch component and said at least one software-based switch component, said expert system application adapted for receiving operational information from said at least one hardware-based

component and said at least one software-based component, issuing, based upon said received operational information, a selected one of a plurality of instructions;

a voice generation application coupled to said switch monitoring system, said voice generation application receiving said selected instruction from said switch monitoring system if said selected instruction is an instruction to issue an audible notification, generating a digitized message corresponding to said audible notification; and

a user interface coupled to said voice generation application, said user interface configured for receiving said digitized message issued by said voice generation application and converting said received digitized message into audible sound.

Claim 11. (Currently Amended) ~~The switch of claim 10 wherein said switch monitoring system further comprises:~~ A switch for a telecommunications network, said switch comprising:

at least one hardware-based component;

at least one software-based component;

a switch monitoring system coupled to each of said at least one hardware-based component of said switch and to each one of said at least one software-based component of said switch, said switch monitoring system receiving operational information from said at least one hardware-based component and said at least one software-based component and issuing, based upon said received operational information, a selected one of a plurality of instructions, at least one of said plurality of instructions being an instruction to issue a specified audible notification;

an expert system application coupled to each one of said at least one hardware-based switch component and said at least one software-based switch component; and

a rules table coupled to said expert system application, said rules table containing information governing operation of said switch;

said expert system application adapted for receiving operational information from said at least one hardware-based component and said at least one software-based component, issuing, based upon said received operational information and said information contained in said rules table, said selected one of said plurality of instructions.

Claim 12. (Currently Amended) ~~The switch of claim 10 wherein said switch monitoring system further comprises:~~ A switch for a telecommunications network, said switch comprising:

at least one hardware-based component;

at least one software-based component;

a switch monitoring system coupled to each of said at least one hardware-based component of said switch and to each one of said at least one software-based component of said switch, said switch monitoring system receiving operational information from said at least one hardware-based component and said at least one software-based component and issuing, based upon said received operational information, a selected one of a plurality of instructions, at least one of said plurality of instructions being an instruction to issue a specified audible notification;

an expert system application coupled to each one of said at least one hardware-based switch component and said at least one software-based switch component; and

a rules table coupled to said expert system application, said rules table containing information governing operation of said switch, said rules table contains a plurality of operating conditions, at least one instruction associated with each operating condition and a numerical value assigned thereto;

said expert system application receiving operational information from said at least one hardware-based component and said at least one software-based component, employing fuzzy logic to rank said at least one instruction contained in said rules table, and initiating a highest ranked one of said at least one instruction.

Claim 13. (Currently Amended) ~~The switch of claim 10 wherein said switch monitoring system further comprises:~~ A switch for a telecommunications network, said switch comprising:

at least one hardware-based component;

at least one software-based component;

a switch monitoring system coupled to each of said at least one hardware-based component of said switch and to each one of said at least one software-based component of said switch, said switch monitoring system receiving operational information from said at least one hardware-based component and said at least one software-based component and issuing, based upon said received operational information, a selected one of a plurality of instructions, at least one of said plurality of instructions being an instruction to issue a specified audible notification;

an expert system application coupled to each one of said at least one hardware-based switch component and said at least one software-based switch component; and

a rules table coupled to said expert system application, said rules table containing a set of rules governing operation of said switch, each one of said set of rules comprised of a first portion containing an operating condition for said switch and a second portion containing an instruction to be taken if said operating condition contained in said first portion is met.

said expert system application receiving operational information from said at least one hardware-based component and said at least one software-based component, and issuing, based upon said received operational information and said information contained in said rules table, said selected one of said plurality of instructions.

Claim 14. (Original) The switch of claim 13 wherein said switch monitoring system further comprises:

an output audibilization table coupled to said voice generation application, said output audibilization table maintaining a plurality of digitized messages, each corresponding to one of said instructions to issue an audible notification, for use, by said expert system, to generate audible messages for transmission to said user interface.

Claim 15. (Original) The switch of claim 14 wherein said user interface further comprises:

an audio output device for receive analog signals and generating audible sounds therefrom; and

a D/A converter having an input coupled to said voice generation application and an output coupled to said audio output device, said D/A converter converting digitized signals received from said voice generation application into analog signals for transmission to said audio output device.

Claim 16. (Original) The switch of claim 13 and further comprising:

a call processing application, said call processing application handling interactions with originating and terminating agents in accordance with an interaction framework;

an interaction application coupled to said call processing application, said interaction application constructing said interaction framework for said call processing application; and

at least one provisioning table coupled to said call processing application, each of said at least one provisioning table containing a plurality of instructions suitable for use by said call processing application;

said interaction application modifying, using selected ones of said plurality of instructions maintained in said provisioning table, said interaction framework for said call processing application.

Claim 17. (Original) The switch of claim 16 and further wherein the switch monitoring system further is a combination switch provisioning/monitoring system, said combination switch provisioning/monitoring system further comprising:

a provisioning system coupled to said call processing application,
said provisioning system provisioning said call processing application for said interactions with said originating and terminating agents;

said human interface configured for receiving voice commands, issued by a switch administrator, for transmission to said provisioning system and transmitting responses, issued by said provisioning system, for transmission to said switch administrator;

a voice recognition application coupled between said human interface and said interaction application; and

a recognizable audible input table coupled to said voice recognition application, said recognizable audible input table maintaining a plurality of recognizable instructions suitable for use, by said interaction module, to modify said interaction framework used by said call processing application;

said voice recognition application configuring for detecting audible sounds, determining if said detected audible sounds corresponds to any of said recognizable instructions maintained in said recognizable audible input table and issuing, to said interaction application, said recognizable instructions corresponding to said detected audible sounds;

said interaction application modifying said interaction framework using said issued instructions.

Claim 18. (Original) The switch of claim 17 wherein said provisioning system further comprises:

a voice generation application coupled between said human interface and said interaction application; and

an output audibilization table coupled to said voice generation application, said output audibilization table maintaining a plurality of audibilizations for use, by said interaction application, to generate audible messages for transmission to said human interface.

Claim 19. (Original) The switch of claim 18 wherein said voice generation application is also coupled to said voice recognition module, said output audibilization table further maintaining a plurality of audibilizations for use , by said voice recognition application, to generate audible messages to said human interface.

Claim 20. (Original) The switch of claim 19 wherein said human interface further comprises:

an audio input device for detecting audible sounds;

an A/D converter having an input coupled to said audio input device and an output coupled to said voice recognition module, said A/D converter converting audible sounds received from said audio input device into digitized signals for transmission to said voice recognition module;

an audio output device for generating audible sounds; and

a D/A converter having an input coupled to said voice generation module and an output coupled to said audio output device, said D/A converter converting digitized signals received from said voice generation module into audible sounds for transmission to said audio output device.

Claim 21. (Currently Amended) A method for reprovisioning a switch, comprising the steps of:

detecting an audible sound;

determining if said audible sound is an audibilized command containing a reprovisioning instruction by comparing said audible sound to a recognizable audible input table maintaining a plurality of recognizable reprovisioning instructions; and

if said audible sound is an audibilized command containing a reprovisioning instruction found in said recognizable audible input table, reprovisioning said switch in accordance with said reprovisioning instruction.

Claim 22. (Original) The method of claim 21 wherein the step of determining if said audible sound is an audibilized command containing a reprovisioning instruction further comprises the steps of:

digitizing said audible sound;

comparing said digitized audible sound with a plurality of recognizable commands;

if said digitized audible sound matches one of said recognizable commands, executing a reprovisioning instruction contained in said digitized audible sound.

Claim 23. (Original) ~~The method of claim 22 wherein the steps of detecting an audible sound and determining if said audible sound is an audibilized command containing a reprovisioning instruction further comprises the steps of:~~ A method for reprovisioning a switch, comprising the steps of:

detecting a first audible sound;

upon detecting said first audible sound, issuing a request for an authorization code;

detecting a second audible sound;

determining if said second audible sound is said requested authorization code;

if said second audible sound is said requested authorization code, detecting a third audible sound; ~~and~~

~~determining if said third audible sound is an audibilized command containing a reprovisioning instruction.~~ digitizing said third audible sound;

comparing said digitized third audible sound with a plurality of recognizable commands;

if said digitized third audible sound matches one of said recognizable commands, executing the reprovisioning instructions contained in said digitized third audible sound.